

Financial Mechanism for the Implementation of Strategic and Operational Financial Decisions of Modern Enterprises

Veronika V. Nikeriasova^a, Konstantin V. Ordov^a, Oleg A. Khvostenko^b

^aPlekhanov Russian University of Economics, Moscow, RUSSIA;

^bSamara State University of Economics, Samara, RUSSIA.

ABSTRACT

In modern conditions of world depression, it is urgent for increasing the efficiency of the financial mechanism. Company's future depends on the correct choice of the financial mechanism strategy. The article deals with the issues of improving the financial mechanism of enterprises in the implementation of strategic and operational financial solutions. The main methods used to achieve this goal: analysis, comparison and methods of modern risk management. There are considered the main stages of financial strategy, its impact on the company's capital. The paper proposes an EB IT-ROE method as the most effective way in making financial decisions. The research results can be used in developing company's financial policy, formation of investment strategies, as well as in scientific textbooks.

KEYWORDS

Financial mechanism,
financial decision, financial strategy,
clear profit, fiscal policy

ARTICLE HISTORY

Received 2 April 2016
Revised 29 September 2016
Accepted 10 October 2016

Introduction

The financial mechanism of enterprises is known to be realized through the development and implementation of strategic and operational financial decisions (Morgera, Tsioumani & Buck, 2014; Ajupov & Kurilova, 2015).

Financial strategy provides for other functional strategies and plays an important role in enhancing the competitiveness of enterprises, ensuring the effective engagement and use of party facilities, coordination of their flow, which ultimately ensures the growth of the enterprise market value and wealth of its owners. Developing financial strategy should be based on financial indexation system of the enterprise, the implementation of which in the strategic period will allow achieving their goals, achieving competitive advantage, and

CORRESPONDENCE Veronika V. Nikeriasova  veronika799@mail.ru

© 2016 Nikeriasova, Ordov & Khvostenko. Open Access terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>) apply. The license permits unrestricted use, distribution, and reproduction in any medium, on the condition that users give exact credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if they made any changes.

increasing the market value of the company (Sherstneva, Vishnyakova & Chuchkalova, 2016).

Formulation and implementation of financial strategy have the following stages:

I. Formation of strategic aims in main areas of financial activity (Lee et al., 2014; Chen & Song, 2013; Min & Faqin, 2013):

- 1) party facilities formation – maximization of net cash flow (clear profit, amortization);
- 2) the effectiveness of allocation and intake of party facilities in all types of activities and structural units – maximization of ROE modeled using the DuPont formula, maximization of investment yield;
- 3) procuring company's solvency – capital structure optimization (equity and loan);
- 4) selection of funding sources rational balance (equity, loan, raised);
- 5) estimate of costs of raised party facilities (WACC allowing to estimate the costs of the fund raising)
- 6) effective fund raising and use of capital in the given frame of ROE, financial stability, capital structure, cost of capital (method of economic value added (EVA): net income exclusive of the cost of fund raising).

II. The choice of strategy includes provision of sustainable growth based on efficient allocation and intake of party facilities. The choice of a strategy may be submitted based on a sustainable growth model (SGR). The model is used to determine business opportunities in the context of mutually agreed marketing, operational and financial requirements.

III. The choice of financial policy includes an increase of clear profit by the end of the strategic period due to different sources (Barnea, Landskroner & Sokoler, 2015; Zhao, 2016; Byrkovich et al., 2015):

- 1) increase of proceeds, increase of profit from investing activities and other types of operational activities;
- 2) reduction of variable costs;
- 3) reduction of fixed costs;
- 4) changes in fiscal policy.

IV. Evaluation and selection of strategic financing alternatives based on sensitivity analyses method, scenario analyses and other methods. The criteria for selection of alternatives, in our opinion, may be the growth rate or absolute value of net cash flow addition, ROE, financial risk reduction.

V. Strategic financial development program includes financial standards, tasks and specific actions with orders to completion date for each strategic aims, as well as the financial unit responsible for its implementation (Yu, Liu & Qiu, 2015; Nemoto et al., 2013; Pan & Bing, 2013).

VI. Estimated strategy includes an analysis of (Schoenmaker & Wierts, 2015; Glocker & Towbin, 2012; Acemoglu, Ozdaglar & Tahbaz-Salehi, 2015):

- 1) its consistency with the internal control mechanism;
- 2) consistency with the external environment (external support system, government regulation, market mechanisms);

- 3) internal balance of strategy parameters on the basis of financial techniques;
- 4) financial strategy feasibility (availability of derivative instruments: leverage, party facilities volume, implementation of investment projects);
- 5) acceptability of financial security;
- 6) economic effectiveness of the strategy based on predictive terminal wage of financial rations.

VII. Strategy marketing board includes (Barnea, Landskroner & Sokoler, 2015; Nemoto et al., 2013; Schoenmaker & Wierts, 2015):

- 1) financial activity strategic changes;
- 2) environment diagnosis;
- 3) the choice of strategy management methods;
- 4) strategy control;
- 5) strategic development program adjusting.

Aim of the Study

Consider the financial mechanism of the enterprises in implementation of financial decisions

Research questions

How can we improve the financial mechanism?

Method

Theoretical and methodological basis of the study are the works of domestic and foreign authors, devoted to financial mechanism management problems, the problem of estimated risk of financial production instruments portfolio, problems of common, exotic and real stock option plan price formation.

The methodological basis of the research were elements of the risk theory, the theory of portfolio analysis, as well as modern methods of risk management. To achieve this purpose were used the methods of probability theory, mathematical statistics and statistical modeling.

Data, Analysis, and Results

The main financial indicator of assets usage, the target value of which must be justified on the basis of the financial mechanism, is a return on equity (share) capital (ROE).

Its modeling is carried out using a modified DuPont formula (Stoyanova, 2002), which makes it possible to evaluate the management of the enterprise not only from the negotiation cost advantages, but also by the efficiency of the use of their own (equity) capital. It also allows determining on account of which factors the return on equity changes (as opposed to usual DuPont formula the assets are replaced with their own (equity) capital):

$$ROE = \frac{NP}{E} 100 = \frac{NPS}{SE} 100 = PsROFL; \quad (1)$$

Where: ROE – return on equity (share) capital;

Ps – profit margin;

RO – sales to total assets;
 NP – clear profit;
 S – sales revenue;
 FL – financial leverage, equity multiple;
 E – share (equity) capital.

Applying to the formula the predicted values of indicators such as sales volume, equity, debt capital and other, you can make a forecast return on equity.

Simulation of return on equity in the framework of the financial mechanism will allow to control the profit rate per capital, to identify ways to improve it, to improve investment directions.

Here are the following ways to increase the return on capital:

- Increase the profitability of sales by reducing current-outlay costs, increasing prices, sale volume, outpacing the growth of current outlays;
- An increase of TAT due to sales volume growth and maintain the value at a constant level or its decrease;
- Increase of financial leverage rate within a safe level for financial stability;
- Reduce of costs for mandatory interest payments, risk assessment in the case of attracting additional external funding.

With an aim of financial mechanism formulation, the return on equity (share) capital addition is estimated by chain substitutions method (Kovalev, 2002) that sets the influence of each baseline by changing its basic amount in composition of the resulting figure to the actual in the reporting period:

1) increase of return for account of profit margin:

$$\Delta ROE = (Ps - Ps) RO FL; \quad (2)$$

1 0 1 1

2) increase of return for account of TAT:

$$\Delta ROE = Ps(RO - RO) FL; \quad (3)$$

1 1 0 1

3) increase of return for account of financial leverage:

$$\Delta ROE = PsRO(FL - FL), \quad (4)$$

1 1 1 0

Where: ΔROE – return on equity (share) capital changes.

The highest values of ΔROE will allow to determine the rate, which has had the greatest impact on the change in return on equity in the direction of its increase. Financial mechanism of priority should be directed to increase this indicator.

The financial mechanism should be based on the methods of predicting the sustainable growth of enterprises (SGR model). SGR is the maximum annual sales gain based on the projected profit ratio, asset turnover, debt and profit reinvestment.

The compromise between the desired company's development index and the actual conditions of external and internal environment is determined based on the SGR model. SGR calculated value indicates the maximum rate of sales growth, consistent with other financial ratios. Whether it will be achieved in

the strategic period depends on the objective factors of the environment and the efficiency of management.

The following model is used to calculate the SGR:

$$SGR = \frac{r \times Ps \times RO \times FL}{1 - r \times Ps \times RO \times FL} \times 100, \quad (5)$$

Where: r – plowback ratio, reflecting the dividend policy (share of clear profit for development);

Ps – profit margin (NP/ S);

RO – TAT (S/A);

FL – leverage ratio (A/E).

SGR model takes into account the characteristics of the various parties of financial and economic activity of the enterprise: production (RO – TAT), financial (FL - structure of sources of funds), the relationship between owners of the company and its management (r – Dividend Policy), the company's market position (Ps – profit margin).

Financial ratios used in calculating SGR are important for the financial mechanism:

- Profit margin records the revenue from product sales, which depends on the company's current market price policy, reflects the control over current production and non-production expenses;
- TAT demonstrates the company's effectiveness, reflects the practice of invested capital management;
- The rate of accumulation and reinvestment depends on the system of internal financing and the dividend policy;
- Financial leverage ratio reflects the principles of fund raising. The higher is the number of loan capital, the higher is this ratio, and thus the chances of return on equity rising increase, since the solution of this problem is targeted by the company's financial leverage. At the same time increases the risk of non-payment of interest for loan.

SGR model allows considering various development scenarios of the enterprise, to achieve rational reference in the sales growth levels, investment and equity. Scenario analysis allows submitting the lack of sensitivity analyses method, as it includes simultaneous change of factors on performance criteria.

As an option, it is advisable to build at least three scenarios: *pessimistic, optimistic and the most likely (realistic)*.

Building a pessimistic scenario due to the deterioration of the values of variables to a certain reasonable level compared with *baseline (realistic)*. Based on these factors, the SGR values are calculated. The obtained values are compared with their basic and then the recommendations are formulated. Recommendations are based on a prerequisite: optimistic scenario cannot be accepted if the calculated values of the indicators are beyond the efficiency, on the contrary, under the pessimistic scenario obtaining the indicator values corresponding to the standard allows speaking about its admissibility.

Thus, the financial mechanism of the enterprise allows to find the achievable sales growth for the given asset turnover, TAT, profit margin, debt-equity ratio, plowback ratio parameters.

The model allows finding the level of parameters that provides a specified sales growth, equity capital volume and secure the financial leverage borders, using various scenarios of enterprise development.

The estimated forms of reporting (plan of income and expense, accounting balance sheet, cash flow statement) may be formulated by a percent of off-load (sales). Future expenses, assets and liabilities are determined toward the period based on the planned sales volume growth in percentage; balanced formats of forecast information (plan of income and expenses, balance sheet, cash flow statement) are drawn out based on the financial parameters. The main advantage of the method is the simplicity and clarity, complexity of use with limited input data. Disadvantages are in connection with the questionable assumption that the organization is constantly working at full capacity, all the related resources are balanced and the capital investments that is all it needs for the growth of sales.

The most important indicator of the company's financial condition is a return on equity (ROE). ROE is an essential characteristic of the company's financial strategy as one of the main financial indicators affecting its market value. Investors interpret the ROE increase as a growth in the value of the issuing company.

The following formula is used to calculate the index:

$$ROE = \frac{(EBIT - I)(1 - T) - D_p}{E}, \quad (6)$$

Where: EBIT – earnings before interest and taxes;

I – interest on loan capital for included in costs;

T – rate of tax on profits;

D_p – return on investment, paid on preferred shares;

E – size of internal capital.

Discussion and Conclusion

In order to make correct calculations it is important to determine the average number of shares, taking into account all the changes taking place during the year. Financial credit documents circulated during the year are fully included in the payment. The shares circulated during the year (have been issued during the year or were in circulation at the beginning of the year, but have been bought out by the company) are included in SSS proportional to the period of circulation. If the dividends are paid during the year in the form of additional shares, they are fully included in SSS.

ROE calculation formula assumes that it is influenced by the financing sources of the enterprise. The amount of dividends on preference shares depends on the number of preferred shares. ROE dependence on the number of ordinary shares is inversely proportional. Thus, the value of ROE is dependent not only on the profitability of the enterprise, but also on its capital structure.

Company's capital structure management is a priority for the financial mechanism. We believe that this process must meet the following principles:

- Optimization of capital structure in order to increase the market value of the company;

- Choice of rational funding under the criterion of minimizing weighted average capital price;
- Ensuring the necessary level of company's financial stability.

The first of these principles is implemented by the EBIT- ROE method, which is used to select the optimal financing scheme by the criterion of maximizing the ROE index.

The method allows determining earnings before interest and taxes for the loan (EBIT), at which the value of the return on equity (ROE) as in financing through debt and the financing of equity funds, will be the same (point of financial negligence). Determination of such equality allows the strategic period to make a reasoned choice between financing activities through equity or loan funds, to determine the best value for them.

The EBIT value at the point of financial negligence can be determined mathematically by using the following formula:

$$\frac{(EBIT - I)(1-T)}{E1} = \frac{(EBIT - I)(1-T)}{E2}, \quad (7)$$

Where: EBIT – earnings before interest and taxes;

I – annual loan interest for each variant;

PD – preference stock dividends;

E1, E2 – equity capital after mobilization of resources for each variant;

T – rate of tax on profits.

Thus, EV IT – ROE method usage under the financial mechanism allows selecting an optimal capital structure in terms of ROE indicator, affecting the enterprise's fair value measurements.

Implications and Recommendations

In our opinion, the financial mechanism based on the use of the indicators, models and methods mentioned above and compatible with the appropriate criteria will allow achieving the desired aims, achieving competitive advantage, increasing the market value of the modern enterprise.

The financial mechanism of the enterprise is a system of management, distribution and use of capital, the purpose of which is to increase profits and decrease costs. The main structural elements of the financial mechanism:

- Investment method
- Financial leverage
- Information Support

The proposed EV IT – ROE method under the financial mechanism helps to determine the most favorable capital structure. This work can be a theoretical basis for improving the financial mechanism of the companies.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Veronika V. Nikeriasova holds a PhD, Associate Professor of Department of Financial Management, Plekhanov Russian University of Economics, Moscow, Russia;

Konstantin V. Ordov holds a PhD, Head of a chair of Department of Financial Management, Plekhanov Russian University of Economics, Moscow, Russia;

Oleg A. Khvostenko holds a PhD, Associate Professor of Department of Finances and Kredit, Samara State University of Economics, Samara, Russia.

References

Acemoglu, D., Ozdaglar, A., & Tahbaz-Salehi, A. (2015). Systemic risk and stability in financial networks. *The American Economic Review*, 105(2), 564-608.

Ajupov, A.A., Kurilova, A.A., & Ivanov, D.U. (2015). Hedging as an important component of the financial mechanism of enterprise management in the automotive cycles. *Mediterranean Journal of Social Sciences*, 6(1S3), 45.

Barnea, E., Landskroner, Y., & Sokoler, M. (2015). Monetary policy and financial stability in a banking economy: Transmission mechanism and policy tradeoffs. *Journal of Financial Stability*, 18, 78-90.

Bufoni, A.L., Oliveira, L.B., & Rosa, L.P. (2015). The financial attractiveness assessment of large waste management projects registered as clean development mechanism. *Waste Management*, 43, 497-508.

Byrkovich, T.I. et al. (2015). Development of financial mechanisms of investment education and science. *Management*, 8(2), 32-39.

Chen, K., & Song, Z. (2013). Financial frictions on capital allocation: A transmission mechanism of the fluctuations. *Journal of Monetary Economics*, 60(6), 683-703.

Glocker, C., & Towbin, P. (2012). Reserve Requirements for Price and Financial Stability-When are they effective? *International Journal of Central Banking*, 8(1), 65-113.

Kovalev, V.V. (2002). Introduction to Financial Management. *Journal of Finance and Statistics*, 477.

Lee, W.G. et al. (2014). Narrative and Finance: Cultural Logic of Financialisation and Financial Crisis-Focusing on the Korean Financial Crisis: Goldsmiths. London: University of London, 248 p.

Min, D., & Faqin, L. (2013). On Impacts of Financial Development on Financial Openness - Based on the Analysis of Economic Growth Effect and Financial Risk Effect. *Shanghai Finance*, 3, 003.

Morgera, E., Tsioumani, E., & Buck, M. (2014). Open Access Article 25. Financial Mechanism and Resources, 2, 325-332.

Nemoto, T. et al. (2013). The Decision-Making Mechanism of Regional Financial Institutions and the Utilization of Soft Information. Japan: Policy Research Institute. *Public Policy Review*, 9, 30.

Pan, G., & Bing, W. (2013). The Influence Mechanism of Financial Innovation on Financial Stability: From the Micro-Finance Perspective of Asset Securitization Business. *South China Finance*, 2, 009.

Schoenmaker, D., & Wierts, P. (2015). Regulating the financial cycle: An integrated approach with a leverage ratio. *Economics Letters*, 136, 70-72.

Sherstneva, N.L., Vishnyakova, A.B., & Chuchkalova, E.I. (2016). Specific Nature of Formation of the Strategic Management Mechanism of Sustainable Development in Modern Economic Conditions. *IEJME-Mathematics Education*, 11(8), 3076-3088.

Starostin, A.Y. (2014). Theoretical foundations of the financial mechanism of reproduction, circulation and export of capital. *Journal of Russian Entrepreneurship*, 12, 4-11.

Stoyanova, E.S. (Ed.) (2002). Financial Management: Theory and Practice: Textbook, 5th Edition, revised and supplemented. Moscow: Perspective, 635.

Yu, L., Liu, H., & Qiu, J. (2015). Research on the Formation Mechanism and Elements of the Financial Industrial Cluster. *Journal of Service Science and Management*, 8(5), 773.

Wang, D., & Ye, S. (2015). A Research on Financial Agglomeration's Knowledge Spillover Mechanism on Economic Growth. *Journal of Beijing Jiaotong University* (Social Sciences Edition), 3, 005.

Zhao, Y. (2016). Online Dispute Resolution Mechanism for Financial Disputes. Symposium on Financial Dispute Resolution in Free Trade Zone (Guangdong) in China. Zhuhai, China, 174 p.